

IN THE CLAIMS:

The text of all pending claims is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below shows added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 2, 3, 14 and 15 without prejudice or disclaimer.

Please AMEND the claims 17, 27, and 28 in accordance with the following:

1.- 16. (Cancelled)

17. (Currently Amended) A central processing unit comprising:

an input unit that inputs a command that can be executed by using a firmware or a logic circuit;

a storing unit that stores a plurality of operation modes, each one of the operation modes corresponding to a different set of commands and a different set of resources required for executing the commands that are available when the each one of the operation modes is set;

a determining unit that determines whether the input command is included ~~or not~~ in the set of commands corresponding to a current operation mode; ~~and~~

an access control unit that, when the input command is included in the set of commands corresponding to the current operation mode, determines whether a necessary resource to execute the input command is included in the set of resources corresponding to the current operation mode; and

an execution unit that, upon the necessary resource being included in the set of resources corresponding to the current operation mode, executes the input command by using the firmware or the logic circuit in conjunction with the necessary resource ~~when the input command is included in the set of commands corresponding to the current operation mode.~~

18. (Previously Presented) The central processing unit according to claim 17, wherein the input unit inputs an operation mode adding command for storing a new operation mode in the storing unit, and

the execution unit makes the storing unit store the new operation mode, when the operation mode adding command is included in the set of commands corresponding to the current operation mode.

19. (Previously Presented) The central processing unit according to claim 18, wherein the execution unit makes the storing unit store the new operation mode, only when a number of commands corresponding to the new operation mode is greater than a number of commands corresponding to any one of the operation modes stored in the storing unit.

20. (Previously Presented) The central processing unit according to claim 17, wherein the input unit inputs a firmware acquiring command for acquiring a new firmware that is used to execute a command, and
the execution unit acquires the new firmware from outside, when the firmware acquiring command is included in the set of commands corresponding to the current operation mode.

21. (Previously Presented) The central processing unit according to claim 20, wherein the execution unit acquires an encrypted firmware and decrypts the encrypted firmware.

22. (Previously Presented) The central processing unit according to claim 20, wherein the execution unit acquires a digitally signed firmware and authenticates the firmware.

23. (Cancelled)

24. (Previously Presented) The central processing unit according to claim 17, further comprising:

an operation mode deleting unit that deletes a specified operation mode from the storing unit; and

a firmware deleting unit that deletes a firmware corresponding to the operation mode deleted.

25. (Previously Presented) The central processing unit according to claim 17, further comprising an execution request unit that requests an external emulator to execute the input command, when the input command is not included in the set of commands corresponding to the current operation mode.

26. (Previously Presented) The central processing unit according to claim 17, wherein

the input unit inputs a logic circuit data acquiring command for acquiring a logic circuit data to generate a new logic circuit that is used to execute a command, and

the execution unit acquires the logic circuit data from outside, when the logic circuit data acquiring command is included in the set of commands corresponding to the current operation mode, and generates the new logic circuit based on the logic circuit data acquired.

27. (Currently Amended) A method for managing a plurality of operating modes comprising:

inputting a command that can be executed by using a firmware or a logic circuit;

determining whether the input command is included ~~or not~~ in a set of commands corresponding to a current operation mode, where each one of the operation modes corresponds to a different set of commands and a different set of resources required for executing the commands that are available when the each one of the operation modes is set; and

determining whether a necessary resource to execute the input command is included in a set of resources corresponding to the current operation mode, upon the input command being included in the set of commands corresponding to the current operation mode; and

executing the input command by using the firmware or the logic circuit in conjunction with the necessary resource, when the ~~input command~~ necessary resource is included in the set of ~~commands~~ resources corresponding to the current operation mode.

28. (Currently Amended) A computer-readable recording medium that stores a computer program for managing a plurality of operating modes, the computer program makes a computer execute:

inputting a command that can be executed by using a firmware or a logic circuit;

determining whether the input command is included ~~or not~~ in a set of commands corresponding to a current operation mode, where each one of the operation modes corresponds to a different set of commands and a different set of resources required for executing the commands that are available when the each one of the operation modes is set; and

determining whether a necessary resource to execute the input command is included in a set of resources corresponding to the current operation mode, upon the input command being included in a set of commands corresponding to the current operation mode; and

executing the input command by using the firmware or the logic circuit in conjunction with the necessary resource, when the ~~input command~~ necessary resource is included in the set of ~~commands~~ resources corresponding to the current operation mode.

29. (Previously Presented) The computer-readable recording medium according to claim 28, wherein

the inputting includes inputting an operation mode adding command for storing a new operation mode in a storing unit that stores the operation modes, and

the executing includes making the storing unit store the new operation mode, when the operation mode adding command is included in the set of commands corresponding to the current operation mode.

30. (Previously Presented) The computer-readable recording medium according to claim 29, wherein the executing includes making the storing unit store the new operation mode, only when a number of commands corresponding to the new operation mode is greater than a number of commands corresponding to any one of the operation modes stored in the storing unit.

31. (Previously Presented) The computer-readable recording medium according to claim 28, wherein

the inputting includes inputting an firmware acquiring command for acquiring a new firmware that is used to execute a command, and

the executing includes acquiring the new firmware from outside, when the firmware acquiring command is included in the set of commands corresponding to the current operation mode.

32. (Previously Presented) The computer-readable recording medium according to claim 31, wherein the executing includes acquiring an encrypted firmware and decrypting the encrypted firmware.

33. (Previously Presented) The computer-readable recording medium according to claim 31, wherein the executing includes acquiring a digitally signed firmware and authenticating the firmware.

34. (Cancelled)

35. (Previously Presented) The computer-readable recording medium according to claim 28, the computer program further makes the computer execute:

deleting a specified operation mode from a storing unit that stores the operation modes;
and
deleting a firmware corresponding to the operation mode deleted.

36. (Previously Presented) The computer-readable recording medium according to claim 28, the computer program further makes the computer execute requesting an external emulator to execute the input command, when the input command is not included in the set of commands corresponding to the current operation mode.